



# HF Happenings 766

Volume 15, Issue 29, the week of 4 September 2017

## Get on the RaDAR....and GO!



### Results of the SARL HF CW Contest

The Contest Committee received 14 logs for the SARL HF CW Contest held on Sunday 27 August 2017.

- 1<sup>st</sup> Hans Kappetijn ZS6KR – 120 points (Silent Keys Memorial Trophy CW)  
2<sup>nd</sup> Raoul Coetzee, ZS1C - 114 points  
3<sup>rd</sup> Jan Botha, ZS4JAN - 112 points  
4<sup>th</sup> Barry Nugent, ZS2NF, and Ed Willers, ZS6UT – 102 points each  
6<sup>th</sup> Georges Schleger, ZS1II – 94 points  
7<sup>th</sup> Vidi la Grange, ZS1EL – 88 points  
8<sup>th</sup> Bruce Dunn, ZS5XT – 72 points  
9<sup>th</sup> Daryl Lamble, ZS6DLL – 54 points  
10<sup>th</sup> Barrie Brokensha, ZS6AJY – 52 points  
11<sup>th</sup> Johan van Aarde, ZS2I – 48 points  
12<sup>th</sup> Stephen van Jaarsveldt, ZS6SVJ – 42 points  
13<sup>th</sup> Oleg Neruchev, ZS1OIN – 32 points  
14<sup>th</sup> Eddie Leighton, ZS6BNE – 22 points

### Highest score on a single band

Barry Nugent, ZS2NF, and Georges Schleger, ZS1II – 60 points each on 40 metres (Anon Trophy)

### Club Competition

- 1<sup>st</sup> Pretoria ARC – 222 points  
2<sup>nd</sup> Bloemfontein ARC – 112 points  
3<sup>rd</sup> Port Elizabeth ARS – 102 points  
4<sup>th</sup> Boland ARC – 88 points  
5<sup>th</sup> Highway ARC – 72 points  
6<sup>th</sup> Centurion ARC – 42 points  
7<sup>th</sup> Lichtenburg ARC – 22 points

### Overall results of the SARL HF Phone, Digital and CW Contests

- 1<sup>st</sup> Jan Botha, ZS4JAN - 445 points (HOS Trough)  
2<sup>nd</sup> Hans Kappetijn, ZS6KR - 234 points  
3<sup>rd</sup> Barry Nugent, ZS2NF - 207 points  
4<sup>th</sup> Bruce Dunn, ZS5XT – 149 points  
5<sup>th</sup> Woody Collet, ZS3WL - 139 points

You can now download your copy of HF Happenings from [www.sarl.org.za/hf\\_happenings.asp](http://www.sarl.org.za/hf_happenings.asp)

### September

- 2 - Eid al Adha; West Rand Flea Market  
3 - National Day of Prayer for the Deaf  
2 and 3 - IARU Region 1 and RSGB SSB Field Day  
4 - Settlers Day  
6 - National Secretary's Day  
9 and 10 – SARL National Field Day  
16 – October RAE Registration closes  
16 and 17 - All Africa All Mode Contest; SARL VHF/UHF Contest  
16 to 23 IARU Region 1 General Conference, Germany  
21/21 Rosh Hashana  
22 – Spring Equinox; Islamic New Year  
22 to 24 – 4 Peaks Challenge  
23 and 24 – CQ RTTY Contest  
23 Sept to 1 Oct Magoebaskloof and Hae-nertsburg Spring festival  
24 – Heritage Day  
25 – Public Holiday; closing date for October Radio ZS articles  
29 – All schools close  
30 - Yom Kippur  
30 Sept to 2 Oct Hermanus Whale Festival

6<sup>th</sup> Theunis Potgieter, ZS2EC - 129 points (Fred Mills Trophy)  
7<sup>th</sup> Marinus Willemstijn, ZS6MAW - 122 points  
8<sup>th</sup> Raoul Coetzee, ZS1C - 114 points  
9<sup>th</sup> Paul Grobler, ZS4PG - 106 points  
10<sup>th</sup> Ed Willers, ZS6UT - 102 points  
11<sup>th</sup> Deon Fraser, ZS5DCF - 98 points  
12<sup>th</sup> Georges Schleger, ZS1II - 94 points  
13<sup>th</sup> Vidi la Grange, ZS1EL - 88 points  
14<sup>th</sup> Stephen van Jaarsveld, ZS6SVJ - 87 points  
15<sup>th</sup> Sid Tyler, ZS5H - 83 points  
16<sup>th</sup> Charles le Roux, ZS1CF - 79 points  
17<sup>th</sup> Garth Moore, ZS2AAR - 75 points  
18<sup>th</sup> Roy Walsh, ZS3RW - 67 points  
19<sup>th</sup> Pierre Holtzhausen, ZS6PJH - 64 points  
20<sup>th</sup> Justin Furner, ZS5KT - 63 points  
21<sup>st</sup> Heather Holland, ZS5YH and Andy Cairns, ZS6ADY - 58 points each  
23<sup>rd</sup> Garth Wheeler, ZS5GMW - 56 points  
24<sup>th</sup> Daryl Lamble, ZS6DLL - 54 points  
25<sup>th</sup> Barrie Brokensha, ZS6AJY - 52 points  
26<sup>th</sup> Johan van Aarde, ZS2I - 48 points  
27<sup>th</sup> Eddie Leighton, ZS6BNE - 44 points  
28<sup>th</sup> Gert Rautenbach, ZR6GR - 43 points  
29<sup>th</sup> Dennis Green, 7P8DG - 41 points  
30<sup>th</sup> Oleg Neruchev, ZS1OIN - 32 points  
31<sup>st</sup> Dennis Green, ZS4BS - 30 points  
32<sup>nd</sup> Johann van den Bergh, ZS6ETA - 27 points  
33<sup>rd</sup> Louis Koen, ZS5LS - 20 points  
34<sup>th</sup> Barend Venter, ZS4BGV - 17 points  
35<sup>th</sup> Jacques Goldsmith, ZS4JAM - 13 points

#### Club Competition

1<sup>st</sup> Bloemfontein ARC – 546 points (The Club Participation Award (Branch Participant Trophy))  
2<sup>nd</sup> Pretoria ARC – 427 points  
3<sup>rd</sup> Highway ARC – 386 points  
4<sup>th</sup> Port Elizabeth ARS – 336 points  
5<sup>th</sup> Bo-Karoo ARC - 139 points  
6<sup>th</sup> Boland ARC – 88 points  
7<sup>th</sup> Centurion ARC – 87 points  
8<sup>th</sup> Hibiscus Coast ARC – 83 points  
9<sup>th</sup> Antique Wireless Association – 58 points  
10<sup>th</sup> Lichtenburg ARC – 44 points

#### ICOM IC-9700

ICOM showed off the new IC-9700 at the Tokyo Ham Fare. All-band, all-mode with full-duplex capability. 100 watts on HF thru 6 metres, 50 watts on 144/432 and 10 watts with the optional 1,2 GHz module. No official price was announced but much speculation about this being a sub-\$3 000 transceiver. Probably not available for 6 – 9 months. [http://mail01.tinyletterapp.com/ke9v/calling-cq-issue-104/9393297-www.icomuk.co.uk/news\\_article/3508/19388/?c=525cc316-4c9f-4513-8bcb-ec9a8d443069](http://mail01.tinyletterapp.com/ke9v/calling-cq-issue-104/9393297-www.icomuk.co.uk/news_article/3508/19388/?c=525cc316-4c9f-4513-8bcb-ec9a8d443069)

#### 60 Metres News

Both Kenya and Estonia now have access to the 60 metre band as of September 1st. For more details on their privileges, see [www.arrl.org/news/view/estonia-kenya-join-60-meter-club](http://www.arrl.org/news/view/estonia-kenya-join-60-meter-club)

#### 3Y0Z Bouvet DXpedition (More on the 160 m Vertical)

Tim Duffy, K3LR, reports: The DX Engineering and Bouvet Island teams have worked together to design an efficient 90 foot top loaded 160 meter vertical antenna that can be installed quickly and safely on Bouvet Island by the 3Y0Z team this January.

With a good radial system, the difference in gain between a 120 ft (full quarter wavelength) vertical and this custom 90 foot top loaded vertical is less than 0.5 dB.

This vertical uses a custom designed heavy duty hinged pivot base with base insulators to accommodate a 40 foot falling derrick 3 inch heavy duty pipe for installation.

The vertical is base fed using two inductors to match to 50 ohms. The first 70 feet of the vertical is Universal Aluminium tower (12 inch face) and the top 20 feet is 1.875 inch diameter aluminium tubing.

There are guys at 30, 50 and 70 feet. There are also three 30 foot top loading wires attached to the top of the tubing that are tied to anchors 60 feet out from the base.

DXE is actually donating two of these vertical packages to the 3Y0Z team in case one gets damaged (there are 300 storms per year on Bouvet).

More details on the construction and the final test raising plus VSWR measurements are shown in the video filmed and produced (in 4K Ultra) by Greg, W8WWV. [www.youtube.com/watch?v=bSw-0TjaUiU](http://www.youtube.com/watch?v=bSw-0TjaUiU)

## P5/3Z9DX Pirate

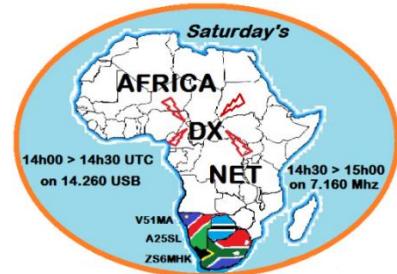
The P5/3Z9DX pirate continues to be active this past week. Reports from a few DX sources state that Dom, 3Z9DX, reports he has not talked to any DX source about his return trip to P5. He adds, "All DX spots are fake and are made by local Polish guy who is not mentally well. If you worked P5/3Z9DX recently you worked a simple clown / pirate. There is still no more information for now from North Korean officials about my return visit. In addition, at the moment, I'm concentrating on other projects for later this year and 2018."

## K1 and KX1 transceiver kits discontinued

Elecraft announced that the K1 and KX1 transceiver kits have been discontinued due to parts availability problems. Both kits have enjoyed a long life (17 years) but now there are questions about how much longer the K2 transceiver kit will be available since it is of the same vintage and shared many similar parts.

## African DX

Senegal, 6W (Update). Ronald, VE3REV, recently moved to Dakar in August 2016, and is expected to be active as 6W1SU for the next 2 to 3 years. Activity will be on 80 - 6 metres and he is currently operating SSB only, but hoping to tackle CW later. His station has a new Yaesu FT DX 1200 with a Yaesu FL1200Z Amp into a MA5B three element Yagi, a 6M 6JXXJ 6 element Yagi and dipoles for 40 and 80 m.



Dave, VE9CB, announced this past week he will be active as 6W1SU in the CQ WW DX CW Contest (25 and 26 November) as a Single-Op/All-Band/High-Power entry. No other details were provided. QSL 6W1SU via MOURX direct or the OQRS (direct or by the Bureau).

Morocco, CN. Tev/TA1HZ and Golkem/TA7AZC will be active as CN2HZ and CN2ZC, respectively, from Ksar es Sghir between 6 and 13 September. They plan to participate in the WAE DX SSB Contest (9 and 10 September) with their CN callsigns. They will be sharing a Yaesu FT991 running 100 w to a Windom antenna. Logs will be uploaded to LoTW and LZ3HI is the QSL Manager for CN2HZ. For CN2ZC, please QSL direct to TA7AZC.

Algeria, 7Y. Bodo, DF8DX, will once again be active as 7Y0A from Bechar between 11 and 22 September. Activity will be on various HF bands using CW and SSB. QSL via info on QRZ.com.

Uganda, 5X. Anton, ON6NL, will once again be active as 5X8C from Entebbe sometime at the end of October 2017. The length of his stay is currently unknown. Activity will be on various HF bands. He plans to be in the CQ WW DX SSB Contest (28 and 29 October). QSL via his home callsign, direct, by the Bureau, LoTW or ClubLog.

## African Islands

### IOTA frequencies

CW: 28 040 24 920 21 040 18 098 14 040 10 114 7 030 3 530 kHz

SSB: 28 560 28 460 24 950 21 260 18 128 14 260 7 055 3 760 kHz

Mauritius, 3B8. Hans, PA3HGT, will be active as 3B8/PA3HGT from Mauritius (AF-049) between 5 and 22 September. Activity will be holiday style on 40, 20 and 10 metres using SSB and possibly some digital modes. Equipment will be an Icom IC-7100 into an Endfed antenna. QSL via his home callsign, direct or by the Bureau. Possibly LoTW (experimental).

Mauritius, 3B8. Flavio, IW2NEF, will be active as 3B8/IW2NEF from the Pearle Beach Resort, Flic en Flac, Mauritius (AF-049), between 16 and 23 October. Activity will be holiday style on various HF bands. He usually will be using an Yaesu FT-857 into a fishing rod antenna at 10 metres. QSL via IK2DUW.

## Listen

Before using a frequency, remember to listen, listen, listen. Please be sensitive to health and welfare frequencies during the ongoing "Harvey" relief, potential "Irma" impacts, and other emergency operations.

## Beacon Challenge

If you operate your own skimmer hardware feeding into the Reverse Beacon Network (RBN), here is a challenge for you [www.ncdx.org/beacon/RBN.html](http://www.ncdx.org/beacon/RBN.html) - can you hear all eighteen of the beacons in the Northern California DX Foundation's International Beacon Project in one-day? [www.ncdx.org/beacon/index.html](http://www.ncdx.org/beacon/index.html) This can be a good test of your location, setup, and band conditions and a chance to get on the leader board.

## The SM-8 Shackmaster

Array Solutions has a new product from Hamation which is said to be a "Swiss army knife for complex set-ups." The SM-8 Shackmaster [www.arraysolutions.com/shackmaster](http://www.arraysolutions.com/shackmaster) is targeted to help solve some of the issues with interfacing radios, PCs, SDR radios like Flex and ANAN to station accessories such as SteppIR controllers, band decoders, and antenna switches. It takes CAT information from one type of radio, and can translate it to other radio types simultaneously, for example from Icom to Yaesu. Being from Hamation, it also works with the ShackLan network.

## Word to The Wise

Oblast - The term for a government-defined region in the former Soviet Union, Belarus, Kazakhstan, Bulgaria, Russia, and Ukraine, like a state or province. It is part of the contest exchange used in the Russian DX Contest.

## Printed Circuit Boards

You can design your own printed circuit boards without leaving the comfort of your computer's desktop! Here's an Instructable on how to get started [www.instructables.com/class/Circuit-Board-Design-Class/](http://www.instructables.com/class/Circuit-Board-Design-Class/)

## Contest Calendar

This week's contests as compiled by Bruce Horn, WA7BNM. The period covered is 4 to 11 September 2017

### ARS Spartan Sprint

01:00 - 03:00 UTC 5 September

Geographic Focus: North America

Participation: Worldwide

Mode: CW

Bands: 80, 40, 20, 15, 10 m

Classes: Skinny; Tubby

Max power: 5 watts

Exchange: RST, state, province or country and power

Work stations: Once per band

Submit logs by: 7 September 2017

E-mail logs to: [spartansprint@yahoo.com](mailto:spartansprint@yahoo.com)

Mail logs to: (none)

Find rules at: <http://arsgrp.blogspot.com/2009/02/so-whats-spartan-sprint-and-how-do-i.html>

### Phone Fray

02:30 - 03:00 UTC 6 September

Geographic Focus: North America

Participation: Worldwide

Mode: SSB

Bands: 160, 80, 40, 20, 15 m

Classes: Single Op

Max power: 100 watts

Exchange: NA: Name and state, province or country; non-NA: Name  
Work stations: Once per band  
QSO Points: NA station: 1 point per QSO; non-NA station: 1 point per QSO with an NA station  
Multipliers: Each US state (including KH6/KL7) once per band; Each VE province/territory once per band; Each North American country (except W/VE) once per band  
Score Calculation: Total score = total QSO points x total mults  
Submit logs by: 03:00 UTC 8 September 2017  
E-mail logs to: (none)  
Post log summary at: <http://www.3830scores.com>  
Mail logs to: (none)  
Find rules at: [http://www.prluma.com/Phone\\_Fray\\_Contest\\_Rules.pdf](http://www.prluma.com/Phone_Fray_Contest_Rules.pdf)

CWops Mini-CWT Test  
13:00 - 14:00 UTC and 19:00 - 20:00 UTC 6 September and 03:00 - 04:00 UTC 7 September  
Geographic Focus: Worldwide  
Participation: Worldwide  
Awards: Worldwide  
Mode: CW  
Bands: 160, 80, 40, 20, 15, 10 m  
Classes: Single Op - QRP, low or high  
Max power: HP: >100 watts; LP: 100 watts; QRP: 5 watts  
Exchange: Member: Name and member no; non-Member: Name and state, province or country  
Work stations: Once per band  
QSO Points: 1 point per QSO  
Multipliers: Each call once  
Score Calculation: Total score = total QSO points x total mults  
Submit logs by: 04:00 UTC 9 September 2017  
Post log summary at: <http://www.3830scores.com>  
Mail logs to: (none)  
Find rules at: <http://www.cwops.org/cwt.html>

UKEICC 80 m Contest  
20:00 - 21:00 UTC 6 September  
Geographic Focus: Europe  
Participation: Worldwide  
Mode: SSB  
Bands: 80 m Only  
Classes: Single Op Connected - QRP, low or high;  
Single Op Unconnected - QRP, low or high  
Max power: HP: 1 500 watts; LP: 100 watts; QRP: 5 watts  
Exchange: 4-Character grid square  
QSO Points: 1 point per 500 km; multiply QSO points by 2 if low power station; multiply QSO points by 4 if QRP station  
Multipliers: (none)  
Score Calculation: Total score = total QSO points

Submit logs by: 22:00 UTC 6 September 2017  
E-mail logs to: (none)  
Upload log at: <http://logs.ukeicc.com/cgi-bin/hfenter.pl>  
Mail logs to: (none)  
Find rules at: <http://www.ukeicc.com/which-contest/which-contest-ukeicc-80m-contests-rules>

NRAU 10 m Activity Contest  
17:00 – 18:00 UTC (CW) and 18:00 - 19:00 UTC (SSB) and 19:00 - 20:00 UTC (FM) and 20:00 - 21:00 UTC 7 September (Dig)  
Geographic Focus: Nordic Europe  
Participation: Worldwide  
Mode: CW, SSB, FM, Digital  
Bands: 10 m Only  
Classes: (none)  
Exchange: RS(T) and 6-character grid square  
QSO Points: (see rules)  
Multipliers: (none)  
Score Calculation: Total score = total QSO points  
Submit logs by: 21 September 2017  
Upload log at: [http://ua9qcq.com/en/submit\\_log.php?lang=en](http://ua9qcq.com/en/submit_log.php?lang=en)  
Mail logs to: (none)  
Find rules at: <http://www.nrau.net/activity-contests/below-30mhz.html>

NCCC RTTY Sprint  
01:45 – 02:15 UTC 8 September  
Geographic Focus: North America  
Participation: Worldwide  
Mode: RTTY  
Bands: (see rules)  
Classes: (none)  
Exchange: Serial no, name and QTH  
Score Calculation: Total score = total QSO points x total mults  
Submit logs by: 10 September 2017  
E-mail logs to: (none)  
Post log summary at: <http://www.3830scores.com/>  
Mail logs to: (none)  
Find rules at: <http://www.ncccsprint.com/rttyns.html>

NCCC Sprint Ladder  
02:30 - 03:00 UTC 8 September  
Geographic Focus: North America  
Participation: Worldwide  
Mode: CW  
Bands: 160, 80, 40, 20, 15, 10, 6 m  
Classes: Single Op  
Max power: 100 watts  
Exchange: Serial no, name and QTH  
Work stations: Once per band  
QSO Points: NA station: 1 point per QSO; non-NA station: 1 point per QSO with an NA station

Multipliers: Each US state (including KL7 and KH6) once per band; Each VE province once per band; Each North American country (except W/VE) once per band  
Score Calculation: Total score = total QSO points x total mults  
Submit logs by: 10 September 2017  
E-mail logs to: (none)  
Post log summary at: <http://www.3830scores.com/>  
Mail logs to: (none)  
Find rules at:  
<http://www.nccsprint.com/rules.html>

WAE DX SSB Contest  
00:00 UTC 9 September to 23:59 UTC 10 September  
Geographic Focus: Europe  
Participation: Worldwide  
Mode: SSB  
Bands: 80, 40, 20, 15, 10 m  
Classes: Single Op – high or low; Multi-Op; SWL  
Max operating hours: Single Op: 36 hours, off times of at least 60 minutes  
Multi-Single: 48 hours  
Max power: HP: >100 Watts; LP: 100 Watts  
Exchange: RS and serial no  
Work stations: Once per band  
Score Calculation: (see rules)  
Submit logs by: 25 September 2017  
E-mail logs to: (none)  
Upload log at: <http://www.darc.de/der-club/referate/conteste/worked-all-europe-dx-contest/logupload/>  
Mail logs to: (none)  
Find rules at: <http://www.darc.de/der-club/referate/referat-conteste/worked-all-europe-dx-contest/en/>

Kulikovo Polye Contest  
00:00 - 23:59 UTC 9 September  
Geographic Focus: Russia  
Participation: Worldwide  
Mode: CW  
Bands: 20 m Only  
Classes: Single Op – low, high or super  
Max power: Super: no limit; High: 1 000 W or less; Low: 100 W or less  
Exchange: KP: RST and "KP"; non-KP: RST and Serial No.  
QSO Points: (see rules)  
Multipliers: (none)  
Score Calculation: Total score = total QSO points  
Submit logs by: 24 September 2017  
E-mail logs to: [log@kpctest.ru](mailto:log@kpctest.ru)  
Upload log at: [http://ua9qcq.com/en/submit\\_log.php?lang=en](http://ua9qcq.com/en/submit_log.php?lang=en)  
Mail logs to: (none)

Find rules at: <http://www.tularadio.ru/?pg=content/kpc-rule-en>

FOC QSO Party  
00:00 - 23:59 UTC 9 September  
Geographic Focus: Worldwide  
Participation: Worldwide  
Mode: CW  
Bands: 160, 80, 40, 20, 15, 10, VHF  
Classes: Single Op  
Exchange: FOC-Member: RST, name and member no; non-Members: RST and Name  
Work stations: Once per band  
QSO Points: 1 point per QSO  
Multipliers: (none)  
Score Calculation: FOC-Member: Score = Total QSOs/Total Member QSOs; non-Member: Score = Total Member QSOs  
Submit logs by: 23 September 2017  
E-mail log summary to: [kz5d@aol.com](mailto:kz5d@aol.com)  
Mail logs to: (none)  
Find rules at: <http://g4foc.org/qso/party/>

SARL Field Day Contest  
10:00 UTC 9 September to 10:00 UTC 10 September  
Geographic Focus: South Africa  
Participation: Worldwide  
Mode: CW, SSB, Digital  
Bands: 160, 80, 40, 20, 15, 10 m  
Classes: Single-Op Field - QRP or high; Multi-Op Field - QRP or high; Ultra-Light Portable; General  
Max power: QRP: 5 watts; non-QRP: >5 watts  
Exchange: number of transmitters, category (see rules) and Province or "DX"  
Work stations: Once per band per mode  
QSO Points: (see rules)  
Multipliers: (see rules)  
Score Calculation: (see rules)  
Submit logs by: 17 September 2017  
E-mail logs to: [zs4bfm@mweb.co.za](mailto:zs4bfm@mweb.co.za)  
Mail logs to: SARL Field Day Contest, PO Box 12104, Brandhof, 9324, South Africa  
Find rules at: <http://www.sarl.org.za/Web3/Members/DoDocDown-load.aspx?X=20161222085537waqSliCvbT.PDF>

SKCC Weekend Sprintathon  
12:00 UTC 9 September to 24:00 UTC 10 September  
Geographic Focus: Worldwide  
Participation: Worldwide  
Awards: Worldwide  
Mode: CW  
Bands: 160, 80, 40, 20, 15, 10, 6 m  
Classes: (none)  
Max operating hours: 24  
Exchange: RST, state, province or country, name and SKCC no or "NONE"

Work stations: Once per band  
 QSO Points: 1 point per QSO  
 Bonus Points: (see rules)  
 Multipliers: Each state, province, or country once  
 Score Calculation: Total score = (total QSO points x total mults) and bonus points  
 Submit logs by: 17 September 2017  
 Post log summary at:  
[http://www.skccgroup.com/operating\\_activities/weekend\\_sprintathon/submit-display.php](http://www.skccgroup.com/operating_activities/weekend_sprintathon/submit-display.php)  
 Mail logs to: (none)  
 Find rules at: [http://www.skccgroup.com/operating\\_activities/weekend\\_sprintathon/](http://www.skccgroup.com/operating_activities/weekend_sprintathon/)

**Ohio State Parks on the Air**  
 14:00 - 22:00 UTC 9 September  
 Geographic Focus: United States/Canada  
 state/province QSO party  
 Participation: Worldwide  
 Mode: SSB  
 Bands: 80, 40, 20, 15, 10 m  
 Classes: Single Op OH Park - low or high; Single Op - low or high; Multi-Single OH Park - low or high; Multi-Multi OH Park - low or high; Multi-Op - low or high  
 Max power: LP: 100 watts; HP: >100 watts  
 Exchange: OH Park: park abbreviation; OH: "Ohio"; W/VE: state or province; DX: "DX"  
 Work stations: Once per band per mode  
 QSO Points: 1 point per QSO  
 Multipliers: Each OH park once  
 Score Calculation: Total score = total QSO points x total mults  
 Submit logs by: 23 September 2017  
 E-mail logs to: [LOGS@ospota.org](mailto:LOGS@ospota.org)  
 Mail logs to: Ohio State Parks on the Air, c/o Tom Parkinson, KB8UUZ, 9992 State Route 700, Mantua, OH 44255, USA  
 Find rules at: <http://www.ospota.org/ospota/wp-content/uploads/2016/12/OSPOTA-Rules2017-10Dec16.pdf>

**Russian Cup Digital Contest**  
 15:00 - 18:59 UTC 9 September and 06:00 - 09:59 UTC 10 September  
 Geographic Focus: Worldwide  
 Participation: Worldwide  
 Mode: RTTY  
 Bands: 80, 40, 20, 15, 10 m  
 Classes: Single Op All Band – low or high  
 Multi-Single  
 Max power: HP: >100 W; LP: 100 W  
 Exchange: Serial no and 4-character grid square  
 Work stations: Once per band per session  
 QSO Points: (see rules)  
 Multipliers: (none)  
 Score Calculation: Total score = total QSO points

Submit logs by: 20 September 2017  
 Upload log at: <http://www.ua9qcq.com>  
 Mail logs to: (none)  
 Find rules at: <http://www.qrz.ru/contest/detail/86.html>

North American CW Sprint  
 00:00 - 04:00 UTC 10 September  
 Geographic Focus: North America  
 Participation: Worldwide  
 Awards: North America  
 Mode: CW  
 Bands: 80, 40, 20 m  
 Classes: Single Op - QRP, low or high  
 Max operating hours: 4 hours  
 Max power: HP: 1 500 watts, LP: 100 watts, QRP: 5 watts  
 Exchange: other station's call, your call, serial no, your name and your state/province/country  
 Work stations: Once per band  
 QSO Points: NA station: 1 point per QSO; non-NA station: 1 point per QSO with an NA station  
 Multipliers: Each US state/DC (including KH6/KL7) once; Each VE province/territory once; Each North American country (except W/VE) once  
 Score Calculation: Total score = total QSO points x total mults  
 Submit logs by: 04:00 UTC 17 September 2017  
 E-mail logs to: (see rules, web upload preferred)  
 Upload log at: <http://www.ncjweb.com/sprintlog-submit/>  
 Mail logs to: Boring Amateur Radio Club, 7580 SW Rood Bridge Rd., Hillsboro, OR 97123, USA  
 Find rules at: <http://ncjweb.com/Sprint-Rules.pdf>

Classic Exchange, CW  
 13:00 UTC 10 September to 08:00 UTC 11 September and 13:00 UTC 12 September to 08:00 UTC 13 September  
 Geographic Focus: Worldwide  
 Participation: Worldwide  
 Mode: CW  
 Bands: 160, 80, 40, 20, 15, 10, 6, 2 m  
 Classes: (none)  
 Exchange: Name, RST, state, province or country and rcvr/xmtr manuf/model  
 Work stations: Once per band per mode per rcr/xmtr manuf/model  
 QSO Points: (see rules)  
 Multipliers: (see rules)  
 Score Calculation: Total score = sum (total mode QSO points x total mode mults) and Bonus Points  
 Submit logs by: 31 December 2017  
 E-mail logs to: [wq8u@arrl.net](mailto:wq8u@arrl.net)  
 Mail logs to: WQ8U, 104 W. Queen St., Hillsborough, NC 27278, USA

Find rules at: <http://www.classexchange.org/sep17/sep17ann.html>

4 States QRP Group Second Sunday Sprint  
00:00 - 02:00 UTC 11 September  
Geographic Focus: North America  
Participation: Worldwide  
Mode: CW, SSB  
Bands: 160, 80, 40, 20, 15, 10 m  
Classes: Single Op  
Exchange: Member: RS(T), state, province or country and member no; Non-member: RS(T), state, province or country and power  
Work stations: Once per band  
QSO Points: 1 point per QSO with non-member; 2 points per QSO with member  
Multipliers: (none)  
Score Calculation: Total score = total QSO points  
Submit logs by: 30 September 2017  
E-mail logs to: (none)  
Post log summary at: <http://qrpcontest.com/4sqrp>  
Mail logs to: (none)

Find rules at:  
[http://www.4sqrp.com/SSS/ss\\_rules.pdf](http://www.4sqrp.com/SSS/ss_rules.pdf)

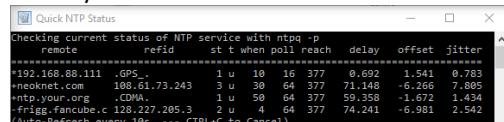
RSGB 80 m Autumn Series, SSB  
19:00 UTC-20:30 UTC 11 September  
Geographic Focus: United Kingdom  
Participation: Worldwide  
Mode: SSB  
Bands: 80 m Only  
Classes: 100 W; 10 W  
Exchange: other station's call, your call, serial no and your name  
QSO Points: 1 point per QSO  
Multipliers: (none)  
Score Calculation: Total score = total QSO points  
Submit logs by: 23:59 UTC 14 September 2017  
Upload log at: <http://www.rsgbcc.org/cgi-bin/hfenter.pl>  
Mail logs to: (none)  
Find rules at:  
<http://www.rsgbcc.org/hf/rules/2017/rautumn.shtml>

## Digikey parts

If you design exclusively with Digikey parts, you can download and use free software for schematic capture, board layout, block diagrams, and more [www.digikey.com/en/resources/design-tools/design-tools](http://www.digikey.com/en/resources/design-tools/design-tools).

## Operating Tip

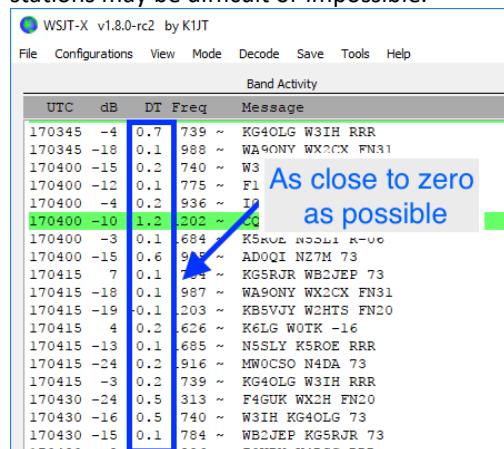
### Time Synchronization



```
Checking current status of NTP service with ntpq -p
+-----+
remote      refid      st t when poll reach   delay offset jitter
+-----+
*192.168.88.111  GPS.        1 u 18    16 377   0.692  1.541  0.783
*neoknet.com     108.61.73.243  3 u 30    64 377   71.148 -6.266  7.885
+ntp.your.org    .CDMA.       1 u 50    64 377   59.358 -1.672  1.434
+frigg.fancube.c 128.227.205.3 2 u 4     64 377   74.241 -6.981  2.542
+-----+
Auto-Refresh every 10s --- CTR+C to Cancel
```

Example output showing millisecond offsets from various time sources using the Meinberg NTP utilities. View the image to expand.

If you're using the new digital modes like JT65 and FT8, it's more important than ever to make sure your computer's time is correct. If your computer's clock is off by more than a second or two, contacts with other stations may be difficult or impossible.



A snipped from the WSJT-X screen. The "DT" column is the Delta Time -- the difference between your computer's clock and the other station's clock. You want this to be as close to zero as possible.

For internet-connected computers, time synchronization could be as easy as turning on and configuration Internet time synchronization in your operating system settings. For those on DXpeditions or otherwise not connected, alternative means of time synchronization such as WWVB or GPS can be used.

The WSJT-X documentation recommends using Meinberg NTP on Windows machines to synchronize with Internet timeservers. Meinberg comes with utilities that help you better monitor the quality and health of your clock synchronization source(s).

## N1MM Logger+

N1MM Logger+ releases later than 1.0.6731 have a new feature that allows adding QSOs to an N1MM log from external programs <http://n1mm.hamdocs.com/tiki-index.php?page=UDP+Broadcasts&structure=N1MM+Logger+Documentation>. JT-Alert <http://hamapps.com/> is already compatible with this interface, so contacts can be made using WSJT-X, which feed into JT-Alert, which are then fed into N1MM Logger+. In technical terms, N1MM Logger+ can be enabled to listen on UDP and TCP ports for ADIF-formatted log information.

## ADIF Version 3.0.6

Version 3.0.6 of the ADIF standard with support for the FT8 mode, was released on 13 August 2017 [http://adif.org/306/ADIF\\_306.htm](http://adif.org/306/ADIF_306.htm). LOTW now supports the upload of FT8 QSOs after a TSQL configuration file update released shortly after the new ADIF standard. To update your TSQL program, see the LOTW website on how to check for TSQL updates, update TSQL and upload your FT8 QSOs <https://lotw.arrl.org/lotw-help/tsql-updates>.

## Next Week's Contests

Classic CW Exchange, 13:00 UTC 10 September to 08:00 UTC 11 September and 13:00 UTC 12 September to 08:00 UTC 13 September

Phone Fray, 02:30 - 03:00 UTC 13 September

CWops Mini-CWT Test, 13:00 - 14:00 UTC and 19:00 – 20:00 UTC 13 September and 03:00 - 04:00 UTC 14 September

NCCC RTTY Sprint, 01:45 - 02:15 UTC 15 September

NCCC Sprint Ladder, 02:30 - 03:00 UTC 15 September

AGB NEMIGA Contest, 21:00 - 24:00 UTC 15 September

Scandinavian Activity Contest, CW, 12:00 UTC 16 September to 12:00 UTC 17 September

All Africa International DX Contest, 12:00 UTC 16 September to 12:00 UTC 17 September

Iowa QSO Party, 14:00 UTC 16 September to 02:00 UTC 17 September

New Hampshire QSO Party, 16:00 UTC 16 September to 04:00 UTC 17 September and 16:00 - 22:00 UTC 17 September

New Jersey QSO Party, 16:00 UTC 16 September to 03:59 UTC 17 September and 14:00 – 20:00 UTC 17 September

QRP Afield, 16:00 - 22:00 UTC 16 September

Washington State Salmon Run, 16:00 UTC 16 September to 07:00 UTC 17 September and 16:00 - 24:00 UTC 17 September

Feld Hell Sprint, 18:00 - 19:59 UTC 16 September

North American RTTY Sprint, 00:00 - 04:00 UTC 17 September

BARTG Sprint 75, 17:00 - 20:59 UTC 17 September

Run for the Bacon QRP Contest, 01:00 - 03:00 UTC 18 September

*Items used with acknowledgement to the ARRL Letter, the ARRL DX News, the ARRL Contest Update, OPDX Bulletin, 425 DX Bulletin, DXNL Newsletter, WIA-News, the RSGB News, DxCoffee, Southgate ARC News, DX World and the Amateur Radio Newsletter*